

REMARKS

New claim 12 has been added. No claims have been amended or canceled. Accordingly, claims 1-12 are currently pending in the application.

35 U.S.C. §102

Claims 1-11 are rejected under 35 U.S.C. §102(b) as being anticipated by Lin. Claims 1-11 are rejected under 35 U.S.C. §102(e) as being anticipated by EP 0871034. These rejections are traversed as follows.

Applicants submit that the pending claims patentably define the present invention over the cited art. In fact, Applicants believe that new claim 12, which is broader than claim 1 because it does not specifically recite the "second quality control information", is also patentable for the reason provided below.

Applicants believe that the Examiner's rejection may be based upon a misinterpretation of Applicants' "control sample" as a "calibration sample". Quality control and calibration are different maintenance processes used in an automatic analysis apparatus. The control sample is used for quality control, while the calibration sample is use for calibration.

Calibration is conducted to plot a calibration curve or line which indicates the relationship between the output

signal levels of the analyzer and the corresponding density values of the analyzed material. The calibration process is such that two or more calibration samples having known different densities of the component are analyzed by the analysis apparatus to determine the output signal levels of the analyzer. Thus, the calibration curve is obtained.

On the other hand, quality control is utilized so as to maintain measurement precision and reliability of the analysis apparatus. A control sample having a known density is measured by the analysis apparatus (already calibrated) periodically. Some measured data acquired by some quality control measurements during a certain time period are processed in a statistical manner to obtain a measurement variation and a data fluctuation of the analyzer in order to check the measurement precision and the reliability of the analysis apparatus.

According to the present invention, as recited in claim 1, the calibration information display unit shows calibration information and first and second quality control information on a screen at one time (see Fig. 2, for example). The control unit produces calibration information for each of the plurality of measurement channels and the first quality control information for each of the plurality of measurement channels. Since the calibration information and the quality

control information of the respective measurement channels can be displayed on the screen at the same time, the conditions of the respective measurement data of the measurement channels can be shown to a user. As a result, the user can easily determine the conditions of the automatic analysis apparatus and find out if there is any problem with any measurement channel.

Lin neither discloses nor suggests displaying the calibration information, let alone displaying the calibration information and the quality control information at the same time on the same screen. Instead, Lin discloses an inter-laboratory performance monitoring system for producing quality control information (not calibration information) for each instrument. Lin discloses that the performance of a given instrument is presented as shown in Fig. 2 of Lin.

Furthermore, as stated in column 12, line 5 to column 14, line 38 and shown in Fig. 2 of Lin, statistical data is produced as the quality control information of the given instrument in a laboratory site. Fig. 2 does not show any calibration data but shows a concordance data chart 100 and table 101 with standard deviations of the control sample measurements. Since the calibration information and the quality control information are not disclosed on the same screen by Lin and, in fact, since the calibration data of a given instrument is

not displayed at all, a user cannot determine whether or not maintenance of the given instrument is necessary.

In response to response to Applicants' arguments in the outstanding Office Action, that Examiner states that "Lin uses known control samples for calibrating and monitoring the quality of the measurement channels" and that "a control is a way to calibrate and make sure that the instrument or apparatus is functioning properly and accurately". However, it is respectfully submitted that this statement is incorrect. Accordingly, new claim 12 has been added which does not specifically recite the second quality control information since this limitation is not necessary for patentability.

EP 0871034 discloses managing intervals for execution of calibration and shows an example of a display screen in Fig. 22. However, the display in Fig. 22 does not show the measured calibration data and quality control data for each of the instruments simultaneously. As such, it is submitted that the pending claims patentably define the present invention over all of the cited art.

Conclusion

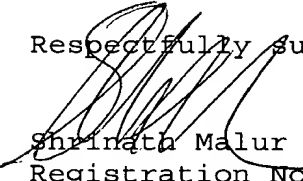
In view of the foregoing remarks, Applicants contend that the above-identified application is now in condition for

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allowance. Accordingly, reconsideration and reexamination are respectfully requested.

Respectfully Submitted,


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